

# MOTOR AGE

Vol. XLIII  
Number 14

PUBLISHED WEEKLY AT THE MALLERS BUILDING  
CHICAGO, APRIL 5, 1923

Thirty-five Cents a Copy  
Three Dollars a Year

8790

**More JORDAN cars  
were sold in Chicago  
last year than any at  
or above the JORDAN  
price — except the  
Cadillac — and I'll take  
off my hat to that  
bunch**

*Edward S. Jordan*

**P. S.—That's something for  
every Dealer in every city  
where Jordan is not repre-  
sented, to think about.  
Write and I'll tell you why.**

**E. S. J.**

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**JORDAN MOTOR CAR CO., Inc., Cleveland, Ohio**

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Teach

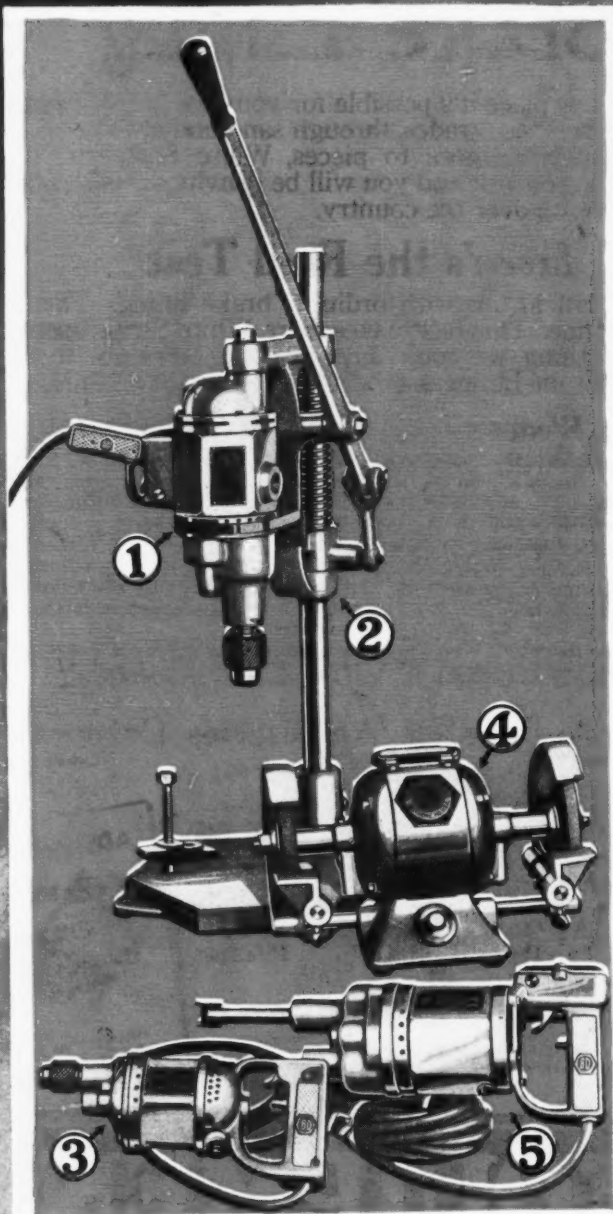
# BLACK & DECKER

## AUTOMOTIVE SERVICE OUTFIT

*"With the Pistol Grip and Trigger Switch"*

# \$ 207 <sup>00</sup>

More than a thousand jobs can be done with these five tools.



### BLACK & DECKER

- |   |  |      |
|---|--|------|
| ① | Half-Inch Special<br>Portable Electric Drill                     | \$68 |
| ② | Bench Drill Stand<br>(Makes a Drill Press of the Portable Drill) | \$28 |
| ③ | Quarter-Inch Portable<br>Electric Drill                          | \$28 |
| ④ | Six-Inch Electric<br>Bench Grinder                               | \$38 |
| ⑤ | Electric Valve Grinder   | \$45 |

ONLY **\$207**

What other five items of shop equipment can you get for only \$207 which will be as useful and make as much profit for you.

**YOUR JOBBER HAS THEM**



**THE BLACK & DECKER MFG. CO.**

Towson Heights, :: Baltimore, Md., U. S. A.

Branch offices and service stations  
carrying complete stocks of parts  
and operated by factory trained  
men located in

Boston  
New York  
Atlanta

San Francisco  
Philadelphia  
Kansas City

Detroit  
Chicago  
Cleveland

Canadian Factory, Lyman Tube Bldg., Montreal, P. Q.



BACKGROUND PATENT PENDING  
BLACK & DECKER MFG. CO.

# Actual Wear Will Convince You

After your Ford brake lining has done a few thousand miles, then it's a question of "Can I stop when I want to?" Or if there's a bad hill or a hard pull, it's—"Can I make it, or am I stuck?"

That's where a cheap lining proves a foolish expense. When ordinary lining wears out and quits, White Stripe is just beginning its long, dependable service.

For Fords



Takes the hills and stands the grind of constant use.

**\$2<sup>10</sup>** Per Set

Sold also in 100 foot and 250 foot rolls.

## White Stripe Brake Lining

will take you any place it's possible for your Ford motor to go. Up and down the steepest grades, through sand and mud holes, where ordinary brake lining goes to pieces, White Stripe will come through. Try it yourself and you will be convinced as hundreds of thousands have, all over the country.

### Here's the Real Test

Take a long hill in low with ordinary brake lining. Then try it with White Stripe. This test makes more White Stripe users every year than anything we could say about it. Once put to the test White Stripe Brake Lining soon displaces other Ford linings.

#### The Weave

White Stripe stands the wear that tears other linings to pieces. The special White Stripe weave puts an extra surface layer of wearing cords over the framework threads, which are exposed to surface wear in ordinary linings. 20% to 50% more cotton—all long staple—than is in any other lining.

#### The Treatment

White Stripe is treated with softening tallowoil treatment that penetrates every fibre, protects it from glazing and burning and keeps the lining soft and pliable. The remarkable results obtained from White Stripe are due to the proper combination of weave and treatment together with the right amount of cotton.

*Insist on the genuine White Stripe. Dealers can get White Stripe instantly from any wholesale house in the country. Our new 1923 catalog will be sent FREE to any established dealer who writes us on his letterhead.*

**Advance Automobile Accessories Corporation**  
1721 Prairie Avenue Dept. 989 Chicago, Illinois

**WHITE STRIPE FAN BELT FOR FORDS and LARGER CARS**

Outwears Six Ordinary Belts on Ford Cars  
Never needs adjustment. For larger cars, too.

**ADVANCE ASBESTOS BRAKE LINING for LARGER CARS**

Made from genuine asbestos for use on larger cars.  
Buy it for Better Brakes and Longer Wear.

**DUPLEX SHOCK ABSORBERS FOR FORDS**

The Shock Absorber for Rough Roads. Eliminates bounce, side-way, vibration. You wouldn't believe a Ford could ride so easy.

**RED STAR TIMER FOR FORDS TRUCKS and TRACTORS**

The scientifically correct timer for Fords; Roller of 100 pt. carbon tool steel; race of bonehard fibre.

**ADVANCE CORK FELTBACK TRANSMISSION LINING FOR FORDS**

Lubricates itself, softens braking action. Makes Ford most responsive, easiest car to handle.

**ADVANCE EQUIPMENT**  
*"Every Product the Best of its Kind"*



# "Have Made More Satisfied Customers Than Any Other Ring I Ever Used!"

## Nonpareil Garage

R. F. WYSONG, Prop.

BATTERY REPAIRING - RADIATOR REPAIRING  
GENERAL OVERHAULING

Tires, Tubes and Accessories  
Genuine Ford Parts

TELEPHONE 234-2

NONPAREIL BUILDING

CAMDEN, OHIO 2-22-3

Indiana Piston Ring Co.,  
Hagerstown, Indiana.

Gentlemen:

Have read with interest the letter and advertisement you have mailed to me and can say you don't exaggerate any for I have used the Perfect Circle Oil Regulating Ring for about six months in Oaklands, Nash, Mitchell, Dodge, Chevrolets, Buicks and Fords and have not had a single come back only for more. I have used about all the so called oil rings on the market with very little satisfaction until I was persuaded by a salesman to try Perfect Circle rings and they have surely brought an end to my troubles and have made more satisfied customers than any other ring I ever used. Thanks to Perfect Circle.

Very truly yours,

*R. F. Wysong (Prop)*

TEETOR



## PISTON RINGS

OIL-REGULATING TYPE, \$1.00 EACH

Up to and including 5 in. diameter

COMPRESSION TYPE, 25c and up

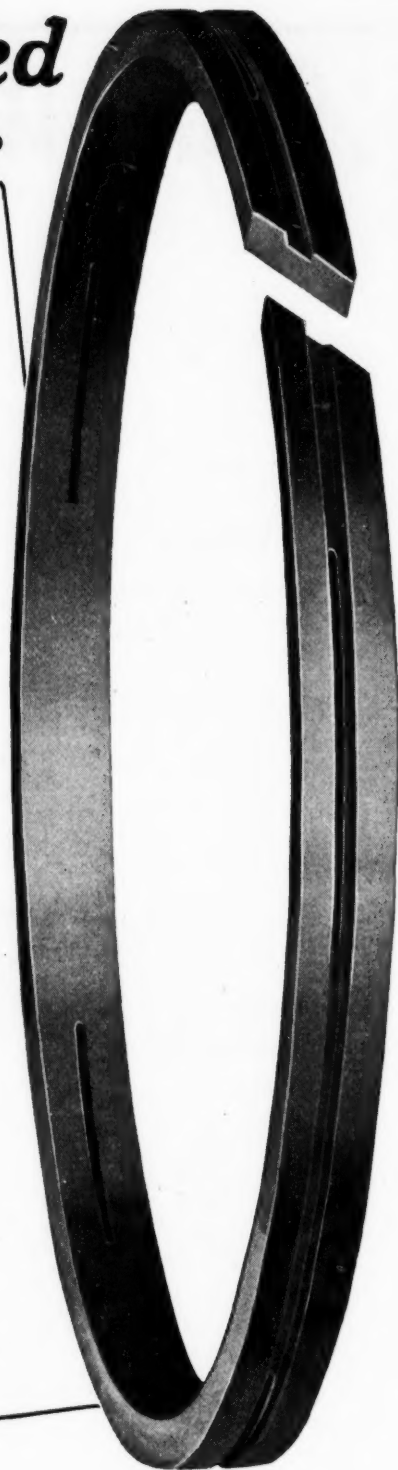
Marketed through recognized automotive jobbers, only.

INDIANA PISTON RING COMPANY

HAGERSTOWN, INDIANA

Harkrader & Harkrader, Western Sales Agent, 1603 S. Michigan Ave., Chicago

© 1923



THE experience related in the above letter is typical of the experience of garage men everywhere. That's why PERFECT CIRCLE Piston Rings have become the leading line with so many jobbers. Write for a trial set today.



# MOTOR AGE

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**THE CLASS JOURNAL COMPANY**  
 MALLERS BUILDING  
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 Entered as Second Class Matter Sept. 19, 1899, at the Post Office  
 at Chicago, Ill., under Act of March 6, 1879.

## Minimum Inventories

*with maximum delivery service*

It is easy to understand the success enjoyed by Goodrich dealers who are interested in building for permanency.

These dealers are enjoying bed-rock inventories and yet are taking care of their trade better than ever.

Our big national distribution system simplifies quick distribution of stock. A close-knit chain of branches, warehouses and depots gets you the tires and tubes you need —when you need them.

Round that out with the known superior service value of Goodrich Tires, a merchandising plan based on the dealer's best interests, and a tried and proven cooperative selling plan.

Write for details.

**THE B. F. GOODRICH RUBBER COMPANY**

Akron, Ohio



# *Read what they say about* **OLDSMOBILE**

"We can say from our experience with Oldsmobile that we have never known any other car to offer such a combination of beauty, strength, power and ability to withstand abuse and deliver such overwhelming satisfaction. Our salesmen believe in the product absolutely and possess such enthusiasm and loyalty that after an explanation of the separate features of any Oldsmobile model, the prospect feels convinced that nowhere is there equal value. We are now entering our third selling season, handling Oldsmobile exclusively."

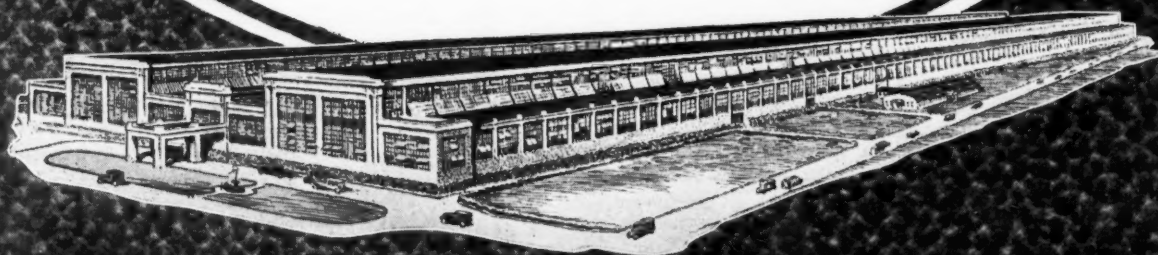
CLOUGH MOTOR COMPANY  
Madison, Me. (February 26, 1923)

When a dealer sings the praises of an automobile to the manufacturer of that automobile, the car is *a good* car in every sense of the word. Our franchise offers you a great opportunity—starting now, when spring business is growing by leaps and bounds.

OLDS MOTOR WORKS, LANSING, MICHIGAN  
*Division of General Motors Corporation*  
FOURS AND EIGHTS

*Oldsmobile enjoys the benefits of the findings of the greatest automobile laboratories in the world—the General Motors Research Laboratories, Dayton, Ohio, shown below. The Oldsmobile Light Eight Engine, after exhaustive tests at these laboratories, was declared the most powerful of all automobile engines of like piston displacement.*

A PRODUCT OF GENERAL MOTORS



# Once a Studebaker Owner, Always a Studebaker Owner

In a certain southern city there are only two dealers in business today who are handling the same line of cars they had four years ago.

One is the Studebaker dealer.

The stability of Studebaker dealers is common knowledge in the industry and among the bankers. It does not "just happen"—it is based upon sound principles of merchandising.

Studebaker's complete line of three models and thirteen body types enables the dealer to appeal to the whole market instead of only a small portion of it.

The result is that Studebaker builds permanent customers because there is always a Studebaker car of the right size, style and price to suit the buyer.

The Studebaker dealer can therefore sell the same buyer time and time again, and not have to refer his customers to his competitor across the street. Herein lies the advantage of the complete line.

If there is a Studebaker opportunity in your city, better look into it before some other farsighted business man takes it.

MODELS AND PRICES—*f. o. b. factories*

LIGHT-SIX 5-Pass., 112' W. B., 40 H. P.	SPECIAL-SIX 5-Pass., 119' W. B., 50 H. P.	BIG-SIX 7-Pass., 126' W. B., 60 H. P.
Touring.....\$ 975	Touring.....\$1275	Touring.....\$1750
Roadster (3-Pass.)..... 975	Roadster (2-Pass.).....1250	Speedster (5-Pass.).....1835
Coupe-Roadster (2-Pass.).....1225	Coupe (4-Pass.).....1875	Coupe (4-Pass.).....2400
Sedan.....1550	Sedan.....2050	Coupe (5-Pass.).....2550
		Sedan.....2750

THE STUDEBAKER CORPORATION OF AMERICA  
South Bend, Indiana



T H I S   I S   A   S T U D E B A K E R   Y E A R



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*Nash Leads the World in Motor Car Value*

# If You Are in Wrong Now Is the Time to Get Right

A wise man knows when to change his mind.

If you are coupled up with a line of cars that you now can see is not the line for you—

If you are working under a contract that you feel is not written to help you—

If you are considering the future when competition gets harder—

If you want a factory organization behind you that is a real help to you—

Then get in touch with the Nash sales department for there's something big waiting for you.

Other men in your position are doing just this and they're doubling and tripling their income.

A letter mailed today asking about open Nash territory will get a prompt reply.

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# NASH

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THE NASH MOTORS COMPANY  
KENOSHA, WISCONSIN

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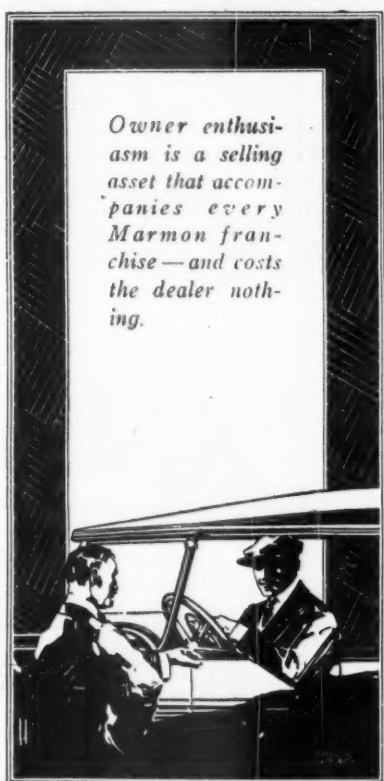
*Nash Leads the World in Motor Car Value*

(1459)

## What Comes After the Sale?

Some dealers find that the cost of selling a car does not end when the sale is made.

For now comes the cost of keeping the customer satisfied. This can be much, or little, according to the policy of the dealer and the mechanical excellence of the car he sells.



That is why a franchise should be chosen with care. Will the car make good, or must the dealer? No other question is so important.

None answers it so well as Marmon. National maintenance averages—\$4.71 per month per car for the 1922-23 series. This means low service cost for the dealer. It means high satisfaction for the owner.

There are other reasons, too, why the Marmon franchise is so sought after—and so profitable. Wouldn't you like to know them?

NORDYKE & MARMON COMPANY

Established 1851

INDIANAPOLIS

Address Inquiries to Dept. A.

# MARMON

*The Foremost Fine Car*

This is the thirty-ninth of a series of fifty-two advertisements appearing in this publication.

# REO

*The Gold Standard of Values*

## A Complete Line For All-Season Sales

**W**HATEVER the sales season or class of service, there's a Reo product to fit. Such completeness is unparalleled.

Passenger car models include the All-Steel-Paneled Coupe and Sedan, the new "Four-Door Brougham" Reo, the new Phaeton Reo and the Seven-Passenger Touring Reo,—all on the famous Reo "Six" chassis.

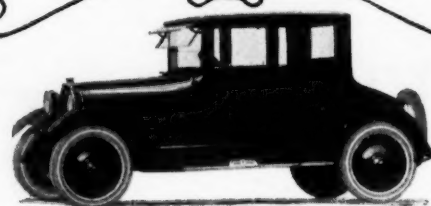
For commercial service is the Mighty Speed Wagon in twelve standard body styles, supplying a haulage unit for practically every business.

In addition, are the new Reo Taxicab and a Bus Chassis, both manufactured from standard *Reo* units.

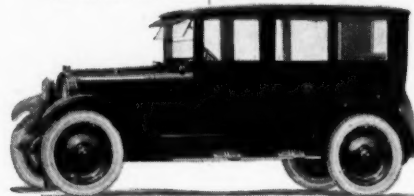
With an experience of nineteen successful years behind them, and being designed and manufactured in the big Reo shops (not assembled), Reo products truly typify "The Gold Standard of Values."

REO MOTOR CAR COMPANY

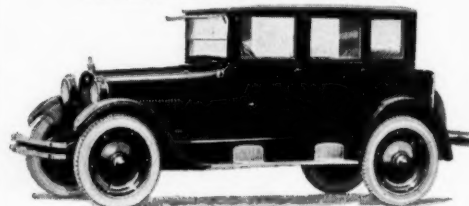
*Lansing, Michigan*



All-Steel-Paneled Four-Passenger Coupe \$1835



All-Steel-Paneled Five-Passenger Sedan \$1885



New "Four-Door Brougham" Reo \$2185



New Phaeton Reo \$1645



Seven-Passenger Touring Reo \$1485



New Reo Taxicab \$2085



Speed Wagon Canopy Express \$1375  
All Prices F. O. B. Lansing, plus tax



# MOTOR AGE



## Touring Promotion Opens Many Sources of Profit

*Sales of Maintenance, Accessories, Tools and Even More Cars Will Follow the Greater and More Enjoyable Mileage of the Cars in Use*

By CLYDE JENNINGS

THE sale of a car should never be considered the completion of a deal. It should and must be (if the dealer will survive) only the first completed step in the adding of another customer for the store. Discounts in the car dealer field are such that in only exceptional cases can the dealer make adequate profit to support the establishment on sales alone.

The successful automobile or transportation store must be composed of several departments—the extent of departmentization depending upon the size of the business. In the smaller stores separate managers are not required, but the very nature of the merchandise forces the idea of departmentization. The stock of a successful transportation store consists of the following elements:

Vehicles—One or more lines.

Accessories—Extra equipment, tires, etc.

Maintenance—New parts and labor.

Used Vehicles—Very hard to dodge.

These are the four sources of profit that confront

every vehicle dealer. In hundreds of cases, only the vehicle sales have been a source of profit; two—maintenance and used cars—have been sources of loss, while accessory sales have been ignored or neglected. As a result, the dealer has made only a slight part of the profit he is entitled to in consideration of his efforts and the capital invested.

The province of this article is a discussion of how to realize a continued profit on each customer. The answer, briefly, is service—but in this connection service is not used as having anything to do with keeping the car in order, as that work comes under the head of maintenance.

Let it be supposed that the introduction to a customer comes through the sale of a new or used car. Some dealers today apparently regard each vehicle they sell as a liability and try to forget the name and address of the customer as soon as possible. The successful merchants regard this customer as an asset and a prospect for a profitable business connection



Denver's \$250,000 camping ground is a mammoth affair, where as many as 5,000 tourists are registered some days. It illustrates the possibilities for profit when these people are properly appealed to

for the future. These merchants seek to please this customer, seek to bring him back to the store frequently and offer him many little services to keep him coming.

A successful transportation merchant said recently that he regarded the popular belief that a car needed adjustment after it had been driven several hundred miles as an asset of inestimable value and he was always glad to render such service, as it offered an opportunity to get acquainted with the car owner under new circumstances; an opportunity to explain maintenance facilities and to generally exploit the establishment; also to talk to the owner about the use of the car. This man sees in this service call on the part of the customer an opportunity to sell the car owner on the points that will make him a customer during the life of the car and make him an excellent prospect for the repeat car sale.

It is of the relations that will help to impress the owner that the dealer is his friend and well-wisher that we are writing. It is, of course, absurd to suggest that the dealer keep the car in repair or that he give to the owner those things that the owner should buy.

There is much that the owner does not know and which he has not the facilities to find out, that the dealer can and should know as a basis of service. Few car owners today fully appreciate the possibilities of the transportation unit they have purchased. Very few of them appreciate the need of regular and consistent lubrication and of seasonable adjustments. Many owners waste money and effort in buying cheap

tires and other unworthy merchandise because this topic has never been properly discussed with them. All of these suggestions are obvious and have been frequently used by dealers who are anxious to build a substantial and profitable business.

There is another phase of helpful information that is less obvious but equally helpful to the owner, and perhaps more profitable to the dealer, that will be considered here. There are several sources of profit, the immediate and most obvious being sales of equipment, tires and maintenance. The remote possibility for profit is the sale of the second car to the owner and the sale of the replacement car when the present one is not good enough. The idea is to keep your owner so close that he will think only in terms of your car.

The service referred to here is based on the travel or touring use of the car. Automobile touring is just coming into its own. There is much about it that is not generally known. There are very few car owners who know the possibilities of week-end tours in their own community, and still fewer who have a proper conception of vacation tours. Thousands of dollars are squandered annually by car owners who start on impossible trips, who send to unreliable agencies for touring maps and information. Thousands of prospective tours are ruined because the car owner has not made the proper preparation of his car. Information on all or any of these subjects will be welcomed by thousands of car owners, and the dealer who extends such a service will make friends.



Suggestion for cover of a booklet of week-end tours which the dealer may get up and mail to customers. Dealers in separate towns may boost each other with these booklets by giving them to tourists



There are two especially pertinent topics for this discussion, as follows:

1. Week-end trips
2. Extended tours

The preparation for the information as to week-end trips should be to have a man or woman make this trip, log the road, get full information as to the objective of the trip, hotels, playgrounds, eating houses, gas stations and maintenance shops. Several photographs should be taken of the interesting places along the route. All of this information can be compiled in a neat folder and sent to the dealer's owners with a letter.

The descriptive literature should make this little trip as attractive as the circumstances will permit. The road should be discussed honestly; drawbacks should be mentioned. If there is need of any special equipment, this can be discussed in the letter. For instance, there may be a clay road on a grade that gets slippery after a summer shower. This should call for a suggestion of chains. Or there may be a strip of narrow road. If so, it might suggest spotlights. Luggage carriers and trunks are always good suggestions for over-night trips. It might be suggested that trunk straps at the back add to the attractiveness of a car and the trunk to its usefulness.

A good deal of sales talk should be made in connection with trips of this kind, and the best part of this sales talk is that there is a reason for it.

Most communities in this country can supply a number of such trips, and the resorts, hotels and other establishments along the route will cooperate with such efforts. Dealers often make these suggestions serve as sort of family parties for their owners. In such parties the subject of conversation often becomes the praise of the dealer who plans the parties. If the family party plan develops, the dealer should send a mechanic along. A trouble wagon may seem to be a rather broad suggestion, but a mechanic with some tool equipment trailing the tourists often aids in a time of need.

A St. Louis dealer made a big hit with his owners a few years ago by a series of these family parties. He even arranged for special prices for his owners at hotels, sent with each party a pathfinder and a rear guard. The latter was the mechanic. After some experience with these parties, the sales-



A "camping window" by Schmelzer Arms Co., Kansas City, Mo. Painted background gives the atmosphere of mountains and lake, with a tent and motor car. A cut-out figure of a camper gives life to the scene, where a practical selection of camping and touring items are shown spread out for use

men were continuous volunteers as pathfinders and the mechanic made quite a nice bonus from the new customers brought into the shop, owners who had strayed to independent shops.

This need not be an expensive plan, but if no one dealer cares to undertake it, the dealer association might prepare a booklet of suggestions which could be distributed generally in the community or supplied to dealers for individual distribution. In Louisville, Ky., a newspaper supplied this service and printed a week-end tour each Sunday. Hundreds of motorists made these trips as suggested, and the only drawback to the plan was that the dealer lost the value of direct sales suggestions.

While the direct sales of equipment and maintenance will often pay for the effort to arrange such tours, the best return is in teaching motorists to use their machines properly, and in forming a friendship between the dealer and his owners. Day by day there is a growing demand for a second car in the family. If the idea of more extensive use of the car is properly developed, there will be a great deal more of this second car demand. In some cases it should be easily possible to persuade the owner that he has need of the old car and that he should keep it instead of turning it in on the new one. It is not uncommon in summer to find in cities men who are deprived of the use of their cars because the "family has gone to the country," and one hardly goes anywhere in a local train without seeing people making a short rail trip because the rest of the family is using the car. This second car idea is only in its budding stage. The full bloom will be amazing.

## 2. The long tour.

Van Dyke, in one of his essays written before the day of the motor car, says:

"It is a sufficient commentary on railway travel that the most important thing about it is to tell how many hours it takes to get from one place to another."

The comparison here was to water transportation, especially the small boat, but think how well it brings up the suggestion of the motor car, a vehicle which can search out the bright bits of scenery, let the traveler stop and look to



Here is a "touring" window, suggestive for dealers, garage men, and any others who wish to hook up their establishments this spring and summer with the touring fever in motor car owners



his heart's content, and yet, when haste is required, almost equal the speed of a train during the daylight hours.

It is amazing, when one goes to a summer resort, to learn how many of the resorters have left cars at home. "We did not know we could use them so well here," is the oft-repeated explanation. Masses of people change the collective mind slowly.

Railways were the travel means in the formative days of the vacation idea. Today the motor car vacation is gaining rapidly, but it needs an urge. The people who "vote as their fathers voted" are still using railways, and there are a good many of these people. One of the chief reasons for leaving the car at home is a lack of knowledge as to how to travel by auto, and a timidity about asking. Comparatively few persons know where such information can be obtained.

The dealer should know where and how reliable travel information can be obtained, and he should let his owners know that he can assist them to get started right on a vacation tour. An early summer letter should plant the motor car vacation idea, and, followed up at intervals, will keep the idea alive. These letters should not fail to keep before the car owner the fact that the dealer can help to make this trip pleasant and safe. The points to be covered by these letters are:

1. Inspection before starting.
2. Automobile Club advice.
3. Routing and information service.

First of all, the dealer should tell his owners that before a long trip is undertaken the car should have a rigid inspection. It should be put into excellent shape as to lubrication, steering, tires, and other often neglected features. Also, this brings opportunity for not only the sale of this inspection service and tires, but such equipment and tools as are likely to be needed. On another page in this issue is printed an elaborated plan for such inspection and sales. This should not be a gratis service.

Very few of the motorists belong to motor car clubs. Dealers generally should urge such a membership among their owners. Motor clubs have great legislative influence, and the automotive dealer who is not active in motor club work is neglecting his best friend. He should advise his members what service the local club can offer, what the state association (if there

is one) can do, and what the A. A. A. and N. A. of M. A. stand for and can do for him.

National touring service is not generally understood. The numerous letters received by MOTOR AGE are evidence of this fact. Hundreds of people are looking for this service, and scores write to MOTOR AGE, saying that the dealer told them to. The dealer who gives such advice has scored a double failure. He has failed to give his customer a service the customer has a right to expect from him, and he has exposed his ignorance of automotive affairs. MOTOR AGE has no touring service to supply, and anyone in the transportation merchandise business should know that touring information is not a part of a dealer publication service.

MOTOR AGE, however, has always had connections by which this information has been supplied to inquirers as a part of its service to the dealers. MOTOR AGE has nothing to gain by serving the car owner except as it promotes dealer interest. The car owner cannot thank us for this service by subscribing to our magazine, as only dealer subscriptions are accepted. The supplying of this service is purely a service to the dealer who suggested the request.

How much better that dealer would have stood with his customer if he had obtained the information and in turn handed it to his customer.

It is not suggested that a dealer attempt to set up a real touring service. The suggestion is that for purely local service he advise his owners to join the local club—if the club is worth while—and for national service he advise his owners of reliable information sources if he does not care to get the information and pass it on. We would suggest that where the dealer gets the information and passes it on he also pass on the charge. This need not be a service for which the dealer pays, unless he cares to. Usually owners are quite willing to pay the nominal fees that are charged.

Dealers should be strongly outspoken against tourists or vacationists starting out with the intention of using old route books and maps. A single mistake costs more in time and gasoline than new and accurate information. Also it is likely to make the trip more or less of a failure.

Concluded on page 29



Section of a map issued by the United States Touring Information Bureau of Waterloo, Ia. Every star marks the location of a camping ground and most of them are free

# Rolling Into Wealth on Automotive Wheels

*Taking the Human Element Into Consideration When Contemplating the Pessimism of the Students of Figures. Touring Is Growing and Is a Substantial Basis for Volume*

By SAM J. SHELTON

**A**MERICA is riding on automotive wheels this year.

It is a long, swift, scenic, joyful, healthful ride—and profitable to both those who ride and those who sensibly sell the wheels and all that is required to make them go and carry their appointed loads.

This is the automotive merchant's era of good times and his opportunities for reasonable profit are being multiplied. For when America rides on wheels it is to the automotive merchant that America must go for the wheeled and powered vehicles, and the supplies, equipment and conditioning necessary to maintain the riding.

At the time this is written nearly three months of the year have passed—a year of which at its beginning it was almost universally predicted that it would be the "best year" from the standpoint of automotive business. The months that are history have surpassed all that was predicted for them in total volume of automotive business. Whether or not individual automotive merchants have profited accordingly depends to a great extent upon the energy and intelligence with which they have conducted their separate establishments. Some have accumulated handsome profits, others have sunk deeper into hopeless obligation.

But the tide of general prosperity rises—too fast it rises, say some of the wise ones, who begin to talk of inflation, another so-called "buyers' strike," and precipitate descent into the depths of another industrial panic.

There is a human element in all business. Sometimes this important fact is almost forgotten by statisticians with their noses industriously furrowing row after row of fruitless figures. Bankers have been known to forget it. Experts and professional prognosticators appear never to have learned it, else they would not so freely predict ruin or riches when this or that column of figures outweighs the others.

The futility of the experts, the smart bankers, and the slaves to figures has no better proof than in the present state of business activity in the United States. "There can be no prosperity in America until conditions are stabilized in Europe." Every reader knows this statement was being broadcast over America not so many months ago by men high in the financial world, men of reputation in the statistical world, men of international fame. Since then Europe has done nothing but become more unstable (with the single exception of Great Britain's recent debt funding agreement with the

United States) and in the United States business has by inverse ratio swelled up and spread its stimulating activity into virtually every section of the country.

Some of the same ones who said it never could happen are now those who cry "inflation!"—"beware after the first of July." Still within the fresh memory of most of us are the emphatic and ponderous verdicts rendered at the beginning of the world war by great financial and economic experts to the effect that a thing on so colossal a scale could not last more than three or four months because the economic and physical resources of the peoples involved would be exhausted within that time.

Having forgotten their lesson, these same, or similar, experts were confident that the present economic struggle between France and Germany in the Ruhr must dissipate itself through exhaustion of one or both nations within a few weeks. Not yet.

These facts are recalled to show how useless are categorical predictions based upon painstaking and usually accurate calculations of so much of this, so many pounds of that, so many millions of dollars here or there. The adaptability of human beings in relation to one another and to their national and artificial resources is of far more importance than all the inventories of all their physical possessions.

The reader, therefore, must not expect to find in this article any predictions, but rather a brief study of the automotive business as it has progressed this year and some of the possibilities and probabilities of the coming months.

Probably the greatest business surprise of the year was the automobile production record for the month of February. The total, according to figures just issued by the Bureau of the Census, was 275,769 motor vehicles, of which 254,415 were passenger cars and 21,354 were trucks.

This startling record gives February, a short month with two holidays, the extraordinary distinction of being the second largest production month in the history of the automotive industry.

Here are the months of greatest production, in order of total number of units:

June, 1922.....	289,011
February, 1923.....	275,769
August, 1922.....	273,425
May, 1922.....	256,219

Production figures for the month of March, 1923, are not available as this is written, but unless there is a surprising reversal of production progress

it is very likely that the output in number of units will exceed any record heretofore attained.

Reports from Detroit are that the larger factories are operating on schedules 10 per cent greater than in February. A horizontal increase of 10 per cent in production throughout the industry, over the February record, would mean that more than 300,000 new motor vehicles would be manufactured.

The production in January this year was 243,082 units. Add to this the production of 275,769 units in February and we have a total of 518,851 motor vehicles manufactured in the first two months of the year. Ordinarily these two months do not rank among the heavy production months of the year. Last year the total output for January and February was 213,476 units, less than half of this year's record for the two months.

The production for the first quarter of this year can hardly fail to exceed 750,000. That is at the rate of 3,000,000 vehicles for the year. Just recently Alfred Reeves, general manager of the National Automobile Chamber of Commerce, has predicted that the year's output will be at least 3,000,000 vehicles, and in the light of past and present performances it does not seem at all a wild hazard.

Last year, it will be remembered, the total production was 2,578,522 cars and trucks. The distribution of this production throughout the year was as follows:

January .....	91,109
February .....	122,366
March .....	172,720
April .....	219,558
May .....	256,219
June .....	289,011
July .....	245,414
August .....	273,425
September .....	205,784
October .....	238,514
November .....	236,980
December .....	226,420

A glance at this table shows how the production rose steadily in the early months of the year until the maximum was reached in June. It is significant because last year factories were producing, not in anticipation of demand, but to fill orders. This was true throughout the latter months of the year when production was sustained at a relatively high mark. At the height of the touring season last year many manufacturers realized that they could have sold considerably more cars if they had been able to produce them in time, but at the beginning of the year factories were disorganized from the hard times of the



preceding year and caution was sitting heavily upon punctured inflation.

Under these circumstances getting into capacity production to meet an unexpected demand was a rather slow process. This year it is different. The machinery was all greased and a certain demand was known to exist. Some of the production in the early weeks of the year was intended as reserve for the heavy demands of early summer, but little of it has remained as reserve. Demand even greater than was expected has absorbed the production practically as fast as it was put out.

The automotive merchants are entering upon what should be their period of greatest business. Spring, moving slowly up from the southland where for some weeks it has been timidly asserting itself, is spreading over the north and east and west. **The call of the open road is sounding and America takes to her automotive wheels.**

What does this mean in new business for the automotive merchant? What is the capacity of the country to absorb it? It is not the province of this article to answer the last question, for it never can be answered with any degree of finality. It is enough to assert here that in every community there are persons eager and able to buy automobiles and all the commodities that go with continued automobile operation.

The country as a whole is more prosperous than it has been since early in 1920. Employment is general and wages, which suffered some reductions after 1920, are being increased in places. The building trades in Chicago are again on the scale of \$1.25 an hour for skilled workers. One of the large woolen mills has increased wages 12½ per cent. The textile workers in New England appear to be about to receive an increase of 10 per cent. The rubber workers in the large tire factories at Akron are being paid a bonus of 10 per cent, and tires have gone up correspondingly. Wage advances in the steel industry are said to be in contemplation.

The improved financial condition of people this year is reflected in the early reports from the Federal income tax returns. Dispatches from Washington stated that payments made up to March 15 exceeded the total of \$400,000,000 set some months ago by Treasury officials as the possible total. An indication of greater prosperity among farmers was seen in the fact that collections from Iowa, Nebraska, Minnesota, Texas, Mississippi, Montana and other farming states were larger than for the corresponding period last year. The proportion of payments in full was said to be greater than last year, an indication of greater purchasing power of the people.

The farmers look forward to the coming crop season with better prospects than for years. Although live stock prices in some instances are lower than at times last year, yet the cost of producing the marketable stock of today was lower. Cattle are slightly higher than a year ago. Grain prices, remaining fairly steady for the last few months,

show quite an advance over a year ago. Corn has been selling at around 73 cents a bushel as compared with 58 a year ago.

Cotton, of which there was a good crop last year, recently reached the highest price in three years, selling at about 31 cents a pound. A year ago it was around 18 cents. This one product has brought millions of dollars in recent months to the farmers of the south and a good crop this year would make them very prosperous.

Cotton played an important in the increase of exports from the United States this year. The volume in January was \$335,539,192, an increase of \$56,690,732 over the first month of last year. The higher price of cotton is said to have accounted for much of this increase of wealth.

One of the most important pieces of legislation enacted by the Congress which recently ended was designed to assist the farmers in financing their purchases and production through the crop season, and even longer. This legislation provided for the creation of 12 regional rural credit banks with appropriations of \$5,000,000 for capitalization of each. Other intermediate banks to be privately capitalized were provided for. The sponsors of his legislation were highly hopeful that it would do much to restore agricultural prosperity.

A national farm survey was recently completed by the National Motor Truck Committee of the National Automobile Chamber of Commerce. The final recapitulation of this survey contains this statement:

**"It is expected that this year's harvest will re-establish the farmer's normal purchasing power." Having reports from 1218 counties in 47 states, the truck committee found that additional trucks were needed in 740, or 61 per cent, of the counties. The automotive merchant who sells trucks will likely find that some of these prospects are in his own vicinity.**

The automobile buyer who cannot pay cash finds the way to buy made easier for him. There has been a wide growth of local financing companies handling automotive paper for good dealers in their own communities. That there is a proper place for these companies when honestly organized and operated, has been stated by the Federal Reserve Board which in its January bulletin gave a complete review of financing companies. The dealer who forms a business connection with a finance company that deals fairly at reasonable rates has a good sales help.

Some of these companies are going so far as to help the customer save the sum necessary for the down payment on his car. This is an adaptation of the Christmas savings plan of the savings bank.

Savings bank depositors are growing. The accounts accumulated for Christmas distribution last December in the United States amounted to \$190,000,000. There will be as much or more again this year.

**With money more plentiful in the pockets of the people this year there is certain to be a vast increase in not only**

**the day by day use of the automobile but also in touring. The N. A. C. C. estimated last year that 60 per cent of the total automobile mileage was exclusively for business purposes. It undoubtedly will be as much again this year, but the 40 per cent that is combined business and recreation, or recreation alone, will account for many a mile of delightful, health-giving, open air traveling for hundreds of thousands of persons. The good roads that are rapidly connecting up all sections of the country will provide the track and the automotive dealers will keep the wheels turning.**

Travel to and from the scenic wonders of America by automobile is becoming so great that railroads seeking their share of tourist travel have been forced to offer especially attractive fares. Most of those who travel great distances by rail, however, make extensive use of automobiles at stopping points. Others who seek playgrounds far from home have their automobiles shipped or driven to the point where needed.

On the whole, then, this year is surpassing the most sanguine hopes of its automotive prophets. A widespread condition of prosperity, which makes nearly every person an automobile user if not an owner, exists and promises to continue indefinitely. It is true that the upward movement of wages and prices is becoming noticeable. It might mean inflation. If prices increased greatly it undoubtedly would mean a check upon buying, not only of things automotive but of many other commodities as well.

**It is remarkable how many things besides automobiles, people can get along without when they believe the prices are too high.**

The existing condition of freight transportation by rail has important bearing upon the automotive industry from two viewpoints. The first is in relation to general business as affected by the difficulty of getting commodities transported when needed. This period of the year usually is a slack time in the loading of freight cars, the normal loadings being about 600,000 cars a week. Actual loadings for a number of weeks have exceeded 900,000 cars a week, closely approaching the railroads' maximum loading capacity of about 1,000,000 cars a week. Students of the railroad situation freely predict that the margin allowed for loading increase is sufficient for only a small part of the requirements that are certain to develop within a few months.

This situation naturally leads to the other viewpoint from which automotive industry is affected—that of automotive transportation as an auxiliary to railway transportation. The inability of railroads to promptly meet all hauling demands naturally will stimulate the already growing use of trucks, not only in the general hauling business, but also by manufacturers in the transportation of their own materials and products. The open weather of summer and good roads will help this phase of the business, and whatever relief is gained thereby will be of value to the whole country.



# Profitable Inspection Service for Tourists

*Fixed Fee, Honest Work and Courtesy Will Mean Good Profits,  
Happy Customers and Much Added Work*

By PAUL DUMAS

**A**BOUT the best way to get a clear picture of any business is to eliminate petty details from the consideration and get back to first principles. The first function of any business, and the foundation upon which all organizations are built, is the ratio of expenditures to receipts. It is this ratio that determines whether a business is sound or otherwise, and a shorter name for it is profit.

The selling of maintenance for everyday commodities, such as shoes, wagons, clothing and lawn mowers, is considered sound, and by the same token maintenance of motor vehicles is potentially a sound and logical business. However, it is often inferred that the percentage of profit in maintenance is so small that it is fundamentally unsound. Before venturing an opinion, let us consider the sources of revenue obtaining in the selling of this acknowledged necessity. In this case we are considering maintenance as separate and distinct from the business of selling new complete vehicles.

## Revenue is derived from:

The sale of accessories

Selling of storage space

Profit on labor and repair parts.

The sale of accessories and the storing of cars are, of course, recognized sources of revenue and can be considered as well-nigh indispensable factors in spelling the difference between profit and loss.

It is certain that as things stand today the profit on labor, when considered separately, does not equal one-third of the total profit, at least in the average establishment employing less than four men. The exercising of first principles of salesmanship recently, through the efforts of the "Ask 'Em to Buy" and selling campaigns by other organizations, has demonstrated that the sale of accessories can be made to show a profit proportionately greater than that derived from labor.

However, this story is not intended as a guide on how to sell accessories or storage, so we shall confine ourselves to the third source of revenue, PROFIT ON LABOR.

Considering labor alone as the source of revenue, something like the following figures are applicable to a small one-man shop. If we assume the average wage as 70 cents per hour for the average mechanic and the average price charged the owner as \$1.25, we find that the gross income for the labor per day of one man will be \$10.

*This article, with accompanying chart, is an outline of what a tourist inspection service means to the dealer and also to the traveler. It presents a plan of how and why to sell such inspections, a suggestion as to prices to be charged and how the maintenance and parts dealer will profit. The figures here presented will not apply to all shops. Conditions vary and figures vary with them. So these figures must be adjusted to your conditions. But one point we want to make especially strong is that touring means MORE CARS, MORE WORK, and, if this is properly handled, MORE PROFITS. So we urge that tourist's trip be made as pleasant as possible, so that he will drive more and more miles each year. Courtesy should enter into all plans for selling this service, but it is not necessary to make a donation to accomplish this.*

Income from 8 hrs. labor at	
\$1.25 .....	\$10.00
Profit from repair parts.....	.50
Gross receipts .....	\$10.50
Deductions—	
Wages for 8 hrs. at \$0.70.....	\$ 5.60
Cost of light per day.....	.40
Cost of heat per day.....	.35
Cost of lost time (including cleaning, mistakes in work, etc.) .....	.25
Cost of rent per day.....	1.00
Total .....	\$ 7.60
Gross receipts .....	\$10.50
Less costs .....	7.60
Net income .....	\$ 2.90

This must cover the depreciation of equipment, the salary of the owner and the interest on an investment of not less than \$1,000. It is apparent that to make a reasonable profit such a shop would be managed and worked by the one man who is both mechanic and owner. If the maintenance merchant is not to play the dual role, it appears that to increase the revenue of the establishment he must have a sufficient volume of work to enable him to employ at least two men. The profit on the labor of two men will pay the owner a small salary, without increasing the cost of doing business.

It must be remembered that this applies to labor alone, and one rarely encounters an establishment that does not

include storage facilities or a stock of accessories. It does explain, however, the mortality of the alley type of maintenance merchant who very often fails to grasp the first principles of business.

It is not an uncommon occurrence when making the audit of a two or three man establishment to find that the shop has during the year shown a loss, or at best, a disregardable profit. This is not the fault of maintenance as a business, but is invariably due to a lack of knowledge of the first principles of business as applied to motor vehicle maintenance. If the proposition is viewed analytically it will be found that the cost of doing business was proportionately too high, or that the personnel was not working at anywhere near capacity. Granting that the management has been fairly efficient, it will generally be found that lack of volume accounts for the absence of profit.

The remedy, it would seem, would be to set about for means of increasing the volume of business on the same floor space and with no increase in the cost of doing business. THE SUMMER TOURING SEASON PROVIDES THE OPPORTUNITY. The increased transportation activity of summer means more cars on the road, and by the law of averages there should be more cars in the establishments of the maintenance merchant.

## The Reason

The sportsman who contemplates a fishing trip inevitably makes preparations for the event by overhauling his equipment and buying additional equipment and supplies. The purchase of additional equipment and the necessity of overhauling is suggested to him by the activity of the sporting goods house which makes special sales efforts on fishing supplies by appropriate window displays and good salesmen.

The fishing season is the touring season, and there should be as much attention paid to the preparation of the car for a long tour as is given to the sale of sporting goods. Cars will be going from New York to the west coast and from California to the Atlantic seaboard, but each car on the road has a home port. It is the business of a wideawake maintenance merchant to fit out these cars before they push off for strange lands, and it is the business on the "on the route" maintenance merchant to see that the tourist's wants are supplied.

Working on the theory that car preparation or inspection is a logical basis

of thought, we have prepared some typical sheets that will enable the dealer in maintenance to give a clearer picture to the owner of what is required for a real preparation.

To sell maintenance intelligently requires that the merchant have a knowledge of what is to be done and that the car owner know beforehand the cost of the service required. This is the basis of flat rate maintenance, a system which has been successfully applied by merchants servicing one or two makes of cars. Successful flat rate presupposes a preliminary inspection where the condition of the vehicle is in doubt.

This inspection should be sold as a separate service, because it is certain that no man can determine the exact condition of a chassis unless he actually views the units that constitute the complete vehicle. The highest type of workman cannot say there is a loose connection at the lighting switch unless he has proven it by electrical tests or visually.

To diagnose is to inspect, either visually or manually, or both, and only by previously inspecting a vehicle can an accurate cost figure be given for the cure. The work done preparatory to the actual repairing is inspection, and IT CAN BE SUCCESSFULLY SOLD AS A SEPARATE SERVICE, ALTHOUGH IT IS LINKED WITH FLAT RATE MAINTENANCE. TO INCREASE THE SUMMER VOLUME, SELL THE CAR OWNER ON INSPECTION, AND MAINTENANCE WILL INEVITABLY TAKE CARE OF ITSELF.

#### *Preparing for the Season*

The idea behind inspection is that it is profitable of itself, and in addition it makes possible an interview with the car owner for the purpose of selling repairs. The first step in the campaign is to see that facilities are at hand to provide this service efficiently. The accessory and repair parts stock should be kept up to par, especially those fittings that make a special summer appeal.

No change is necessary in the personnel except that one or two additional men will be required. If the establishment is located at the junction of heavily traveled roads or is a recognized tourist's stopping place it will pay to hire a night man. The regular caliber of night man who is only capable of washing cars and doing tire work is not suited to care for the emergency repair work of the touring season. As there is an increased volume of car washing and tire work in summer, he should not be supplanted by a night mechanic, but rather a night mechanic should be put on in addition.

A little thought devoted to the tool equipment will increase the amount of work or inspection in a given time. For the rapid completion of the "en route inspection" the minimum number of tools in a small portable box or kit are necessities. The most efficient hand tools for these inspection kits can be determined by the individual, but one of the fastest

## Is Your Car Ready for Tomorrow?

Although you believe that your car is in perfect condition, the day's driving may have loosened vital parts. Annoying squeaks develop from the loosening effects of vibration.

### WHILE YOU ARE AT THE HOTEL

We Will Do All That Is Listed Below For

## \$1.50

You may authorize any necessary work now, or we will communicate with you after we have completed the inspection.

- 1—Inspect spare tires to see that they are inflated.
- 2—Inspect radiator for leaks.
- 3—Inspect front hub caps for tightness.
- 4—Inspect rim lugs.
- 5—Inspect all steering connections.
- 6—Inspect all parts or fittings at the front end of the car that are held on by bolts or screws.
- 7—Take a look at the sod pan to see that it is securely anchored.

#### *Raise the Hood*

- 8—Inspect all hose connections.
- 9—Inspect fan for tightness of belt and lubrication of fan bearing.
- 10—Inspect water pump packing nut for leaks (tighten if loose).
- 11—Open drain on vacuum tank and allow sediment to drain off.
- 12—Open drain on carburetor and allow sediment to drain off.
- 13—Inspect all anchorages of parts or fittings held on by bolts or screws in engine compartment (including hood and sill fittings and engine anchor bolts).

#### *Lower the Hood*

- 14—Inspect battery for water and ground connection.
- 15—Try horn button.
- 16—Inspect back of instrument board (see that all wires and nuts are tight).
- 17—Inspect foot pedals for interference with floor boards.
- 18—Turn on all light switches and see whether all lamps are lighted.
- 19—Pull on the emergency brake lever to see that linkage is not disconnected.

#### *Get Under the Car*

- 20—Inspect the drive shaft assembly for loose fabric disc bolts or loose covers on metallic joints.
- 21—Inspect torque arm for broken spring.
- 22—Inspect all parts or fittings anchored by bolts or screws, including body bolts, fender anchorages, muffler anchorage, brake linkage and cotter pins.
- 23—Trace gasoline from tank and see that tubing does not rest on any portion of the car that would cause chafing or breakage.
- 24—Inspect gas tank and its anchorage.
- 25—Inspect rear tire carrier.
- 26—Inspect all parts at the rear of the car that are anchored by bolts or screws.

This service includes tightening of loose nuts but does not include labor required to repack or repair any portion of car that is in need of replacement or repair.

*The "enroute" inspection chart with merchandising appeal added*

tools for testing the tightness of a nut is the adjustable type of rim lug wrench. The wrench in question operates on the principle of the carpenter's brace chuck and is adjustable without removing the hands from the handle. The bulk of the work consists in exercising the eye and applying the wrench, and the wrench that will take a wide variety of sizes is best for inspection, although it may be advisable to use a solid socket or end wrench to complete the tightening of an obstinate nut.

A large capacity garage jack that will lift the entire front end of a heavy passenger car is a necessity, especially when inspecting the wheels and steering connections. An assortment of cotter pins and lock washers should be included in the portable tool box.

#### *The Charts in Operation*

It requires about half an hour to tell a man verbally all that should be done to prepare a car for a long cross-country tour. It is doubtful if the average owner,



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